Contents:

Volume 153, Number 1, April 2, 2001

In Brief

Mutant huntingtin aggregation does not require tTG.
Cycling of ribosome biogenesis components.
Twist and tilt in actin depolymerization.
Secretory granule motion near the plasma membrane.
Role of the centrosome.
A.W. Dove

Regular Articles

1 **Agrin-induced phosphorylation of the acetylcholine receptor regulates cytoskeletal anchoring and clustering.**
L.S. Borges and M. Ferns

13 **Protein particles in *Chlamydomonas* flagella undergo a transport cycle consisting of four phases.**
C. Iomini, V. Babaev-Khaimov, M. Sassaroli, and G. Piperno

25 **Tissue transglutaminase does not contribute to the formation of mutant huntingtin aggregates.**
W. Chun, M. Lesort, J. Tucholski, C.A. Ross, and G.V.W. Johnson

35 **TGF-β/Smad3 signals repress chondrocyte hypertrophic differentiation and are required for maintaining articular cartilage.**
X. Yang, L. Chen, X. Xu, C. Li, C. Huang, and C.-X. Deng

47 **A role for actin, Cdc1p, and Myo2p in the inheritance of late Golgi elements in *Saccharomyces cerevisiae.***
O.W. Rossanese, C.A. Reinke, B.J. Bevis, A.T. Hammond, I.B. Sears, J. O'Connor, and B.S. Glick

63 **The Vfl1 protein in *Chlamydomonas* localizes in a rotationally asymmetric pattern at the distal ends of the basal bodies.**
C.D. Silflow, M. LaVoie, L.-W. Tam, S. Tousey, M. Sanders, W.-c. Wu, M. Borodovsky, and P.A. Lefebvre

75 **Actin depolymerizing factor stabilizes an existing state of F-actin and can change the tilt of F-actin subunits.**
V.E. Galkin, A. Orlova, N. Lukoyanova, W. Wriggers, and E.H. Egelman

87 **Skeletal malformations caused by overexpression of Cbfa1 or its dominant negative form in chondrocytes.**
C. Ueta, M. Iwamoto, N. Kanatani, C. Yoshida, Y. Liu, M. Enomoto-Iwamoto, T. Ohmori, H. Enomoto, K. Nakata, K. Takada, K. Kurisu, and T. Komori

101 **Centromeres are specialized replication domains in heterochromatin.**
K. Ahmad and S. Henikoff

111 **FtsZ ring formation at the chloroplast division site in plants.**°
S. Vitha, R.S. McAndrew, and K.W. Osteryoung

121 **Cyclin A is destroyed in prometaphase and can delay chromosome alignment and anaphase.**°
N. den Elzen and J. Pines

137 **Anaphase-promoting complex/cyclosome–dependent proteolysis of human cyclin A starts at the beginning of mitosis and is not subject to the spindle assembly checkpoint.**°
S. Geley, E. Kramer, C. Gieffers, J. Gannon, J.-M. Peters, and T. Hunt

149 **Regulation of Op18 during spindle assembly in *Xenopus* egg extracts.**
P.P. Budde, A. Kumagai, W.G. Dunphy, and R. Heald

159 **The surveillance mechanism of the spindle position checkpoint in yeast.**°
N.R. Adames, J.R. Oberle, and J.A. Cooper

169 **Nucleolar components involved in ribosome biogenesis cycle between the nucleolus and nucleoplasm in interphase cells.**
D. Chen and S. Huang

177 **Restriction of secretory granule motion near the plasma membrane of chromaffin cells.**
L.M. Johns, E.S. Levitan, E.A. Shelden, R.W. Holz, and D. Axelrod

191 **Identification of EPI64, a TBC/rabGAP domain–containing microvillar protein that binds to the first PDZ domain of EBP50 and E3KARP.**
D. Reczek and A. Bretscher

207 **Role of diacylglycerol kinase α in the attenuation of receptor signaling.**
M.A. Sanjuán, D.R. Jones, M. Izquierdo, and I. Mérida

Reports

221 **The inhibitor of apoptosis protein-binding domain of Smac is not essential for its proapoptotic activity.**
D.L. Roberts, W. Merrison, M. MacFarlane, and G.M. Cohen

°The online version of this article contains supplemental material.

229 **Actin bound to the heterogeneous nuclear ribonucleoprotein hrp36 is associated with Balbiani ring mRNA from the gene to polysomes.**
P. Percipalle, J. Zhao, B. Pope, A. Weeds, U. Lindberg, and B. Daneholt

237 **Centrosomes enhance the fidelity of cytokinesis in vertebrates and are required for cell cycle progression.**
A. Khodjakov and C.L. Rieder

Volume 153, Number 2, April 16, 2001

In Brief

Single cell cytochrome c release.
Second checkpoint in ERK signaling.
Selective vacuole targeting.
Myopalladin and muscle sarcomere structure.
Pushing the nucleus to the center.
A.W. Dove

Comment

F1 **Psychosine, cytokinesis, and orphan receptors: Unexpected connections.**
T.J. Mitchison

Regular Articles

243 **Desmoglein isoform distribution affects stratum corneum structure and function.**
P.M. Elias, N. Matsuyoshi, H. Wu, C. Lin, Z.H. Wang, B.E. Brown, and J.R. Stanley

251 **Nuclear import of histone H2A and H2B is mediated by a network of karyopherins.**
N. Mosammaparast, K.R. Jackson, Y. Guo, C.J. Brame, J. Shabanowitz, D.F. Hunt, and L.F. Pemberton

263 **Conversion of *zonulae occludentes* from tight to leaky strand type by introducing claudin-2 into Madin-Darby canine kidney I cells.**
M. Furuse, K. Furuse, H. Sasaki, and S. Tsukita

273 **Integrin-mediated adhesion regulates ERK nuclear translocation and phosphorylation of Elk-1.**
A.E. Aplin, S.A. Stewart, R.K. Assoian, and R.L. Juliano

283 **Identities of sequestered proteins in aggregates from cells with induced polyglutamine expression.**
S.T. Suhr, M.-C. Senut, J.P. Whitelegge, K.F. Faull, D.B. Cuizon, and F.H. Gage

295 **OSP/claudin-11 forms a complex with a novel member of the tetraspanin super family and β1 integrin and regulates proliferation and migration of oligodendrocytes.**
S.K. Tiwari-Woodruff, A.G. Buznikov, T.Q. Vu, P.E. Micevych, K. Chen, H.I. Kornblum, and J.M. Bronstein

307 **An exclusively nuclear RNA-binding protein affects asymmetric localization of *ASH1* mRNA and Ash1p in yeast.**
R.M. Long, W. Gu, X. Meng, G. Gonsalvez, R.H. Singer, and P. Chartrand

319 **Cytochrome c maintains mitochondrial transmembrane potential and ATP generation after outer mitochondrial membrane permeabilization during the apoptotic process.**
N.J. Waterhouse, J.C. Goldstein, O. von Ahsen, M. Schuler, D.D. Newmeyer, and D.R. Green

329 **Regulation of the growth of multinucleated muscle cells by an NFATC2-dependent pathway.**
V. Horsley, B.B. Friday, S. Matteson, K.M. Kegley, J. Gephart, and G.K. Pavlath

339 **Microdomains of high calcium are not required for exocytosis in RBL-2H3 mucosal mast cells.**
S.F. Mahmoud and C. Fewtrell

351 **Mammalian Abp1, a signal-responsive F-actin–binding protein, links the actin cytoskeleton to endocytosis via the GTPase dynamin.**
M.M. Kessels, Å.E.Y. Engqvist-Goldstein, D.G. Drubin, and B. Qualmann

367 **Regulation and localization of the Bloom syndrome protein in response to DNA damage.**
O. Bischof, S.-H. Kim, J. Irving, S. Beresten, N.A. Ellis, and J. Campisi

381 **Cvt9/Gsa9 functions in sequestering selective cytosolic cargo destined for the vacuole.**
J. Kim, Y. Kamada, P.E. Stromhaug, J. Guan, A. Hefner-Gravink, M. Baba, S.V. Scott, Y. Ohsumi, W.A. Dunn, Jr., and D.J. Klionsky

397 **A mechanism for nuclear positioning in fission yeast based on microtubule pushing.**
P.T. Tran, L. Marsh, V. Doye, S. Inoué, and F. Chang

413 **Myopalladin, a novel 145-kilodalton sarcomeric protein with multiple roles in Z-disc and I-band protein assemblies.**
M.-L. Bang, R.E. Mudry, A.S. McElhinny, K. Trombitás, A.J. Geach, R. Yamasaki, H. Sorimachi, H. Granzier, C.C. Gregorio, and S. Labeit

Reports

429 **Identification of a molecular target of psychosine and its role in globoid cell formation.**
D.-S. Im, C.E. Heise, T. Nguyen, B.F. O'Dowd, and K.R. Lynch

435 **Stu2 promotes mitotic spindle elongation in anaphase.**
F. Severin, B. Habermann, T. Huffaker, and T. Hyman

443 **Flagellar radial spoke protein 3 is an A-kinase anchoring protein (AKAP).**
A.R. Gaillard, D.R. Diener, J.L. Rosenbaum, and W.S. Sale

Volume 153, Number 3, April 30, 2001

In Brief

Knowing when to stop.
Stretching out kinetochores.
Aggresoming viruses.
Intermediate filaments on the move.
Sustained tension.
W.A. Wells

Comment

F5 **Lamins and apoptosis: A two-way street?**
B. Burke

Regular Articles

449 **Aggresomes resemble sites specialized for virus assembly.**
C.M. Heath, M. Windsor, and T. Wileman

457 **Negative regulation of the SAPK/JNK signaling pathway by presenilin 1.**
J.W. Kim, T.-S. Chang, J.E. Lee, S.-H. Huh, S.W. Yeon, W.S. Yang, C.O. Joe, I. Mook-Jung, R.E. Tanzi, T.-W. Kim, and E.-J. Choi

465 **Inhibitory role of α6β4-associated erbB-2 and phosphoinositide 3-kinase in keratinocyte haptotactic migration dependent on α3β1 integrin.**
E. Hintermann, M. Bilban, A. Sharabi, and V. Quaranta

479 **Involvement of the lamin rod domain in heterotypic lamin interactions important for nuclear organization.**
E.C. Schirmer, T. Guan, and L. Gerace

491 **An RGD sequence in the $P2Y_2$ receptor interacts with $\alpha_V\beta_3$ integrins and is required for G_o-mediated signal transduction.**
L. Erb, J. Liu, J. Ockerhausen, Q. Kong, R.C. Garrad, K. Griffin, C. Neal, B. Krugh, L.I. Santiago-Pérez, F.A. González, H.D. Gresham, J.T. Turner, and G.A. Weisman

503 **Insights into the dynamic properties of keratin intermediate filaments in living epithelial cells.**
K.H. Yoon, M. Yoon, R.D. Moir, S. Khuon, F.W. Flitney, and R.D. Goldman

517 **Merotelic kinetochore orientation is a major mechanism of aneuploidy in mitotic mammalian tissue cells.**
D. Cimini, B. Howell, P. Maddox, A. Khodjakov, F. Degrassi, and E.D. Salmon

529 **Rapid cycling of lipid raft markers between the cell surface and Golgi complex.**
B.J. Nichols, A.K. Kenworthy, R.S. Polishchuk, R. Lodge, T.H. Roberts, K. Hirschberg, R.D. Phair, and J. Lippincott-Schwartz

543 **Lack of pericytes leads to endothelial hyperplasia and abnormal vascular morphogenesis.**
M. Hellström, H. Gerhardt, M. Kalén, X. Li, U. Eriksson, H. Wolburg, and C. Betsholtz

555 **ΔN89β-Catenin induces precocious development, differentiation, and neoplasia in mammary gland.**
A. Imbert, R. Eelkema, S. Jordan, H. Feiner, and P. Cowin

569 **Rho-kinase–mediated contraction of isolated stress fibers.**
K. Katoh, Y. Kano, M. Amano, H. Onishi, K. Kaibuchi, and K. Fujiwara

585 **A new focal adhesion protein that interacts with integrin-linked kinase and regulates cell adhesion and spreading.**
Y. Tu, Y. Huang, Y. Zhang, Y. Hua, and C. Wu

599 **Real time fluorescence imaging of PLCγ translocation and its interaction with the epidermal growth factor receptor.**
M. Matsuda, H.F. Paterson, R. Rodriguez, A.C. Fensome, M.V. Ellis, K. Swann, and M. Katan

Reports

613 **Tumor suppressor p53 binding protein 1 (53BP1) is involved in DNA damage–signaling pathways.**
I. Rappold, K. Iwabuchi, T. Date, and J. Chen

621 **Mistargeting of B-type lamins at the end of mitosis: Implications on cell survival and regulation of lamins A/C expression.**
R.L. Steen and P. Collas

627 **Activation of the Arp2/3 complex by the actin filament binding protein Abp1p.**
B.L. Goode, A.A. Rodal, G. Barnes, and D.G. Drubin

635 **ADDITIONS AND CORRECTIONS**

Volume 153, Number 4, May 14, 2001

In Brief

Plakoglobin helps cells come unglued.
Younger focal adhesions pull harder.
Mammary morphogenesis.
Zipping up ion channels.
Sorting out polyubiquitination.
A.W. Dove

Comment

F9 **A new role for ion channels in myoblast fusion.**
E. Cooper

Mini-Review

F13 **La protein and the trafficking of nascent RNA polymerase III transcripts.**
R.J. Maraia

Regular Articles

637 **The *Drosophila* protein Asp is involved in microtubule organization during spindle formation and cytokinesis.**
J.G. Wakefield, S. Bonaccorsi, and M. Gatti

649 **Components of a ubiquitin ligase complex specify polyubiquitination and intracellular trafficking of the general amino acid permease.**
S.B. Helliwell, S. Losko, and C.A. Kaiser

663 **Metaphase arrest with centromere separation in *polo* mutants of *Drosophila*.**
M.M. Donaldson, Á.A.M. Tavares, H. Ohkura, P. Deak, and D.M. Glover

677 **Human myoblast fusion requires expression of functional inward rectifier Kir2.1 channels.**
J. Fischer-Lougheed, J.-H. Liu, E. Espinos, D. Mordasini, C.R. Bader, D. Belin, and L. Bernheim

687 **Smads, TAK1, and their common target ATF-2 play a critical role in cardiomyocyte differentiation.**
K. Monzen, Y. Hiroi, S. Kudoh, H. Akazawa, T. Oka, E. Takimoto, D. Hayashi, T. Hosoda, M. Kawabata, K. Miyazono, S. Ishii, Y. Yazaki, R. Nagai, and I. Komuro

699 **Phosphorylation-dependent regulation of ryanodine receptors: A novel role for leucine/isoleucine zippers.**
S.O. Marx, S. Reiken, Y. Hisamatsu, M. Gaburjakova, J. Gaburjakova, Y.-M. Yang, N. Rosemblit, and A.R. Marks

709 **A link between the synthesis of nucleoporins and the biogenesis of the nuclear envelope.**
M. Marelli, C.P. Lusk, H. Chan, J.D. Aitchison, and R.W. Wozniak

725 **Intramitochondrial localization of universal minicircle sequence-binding protein, a trypanosomatid protein that binds kinetoplast minicircle replication origins.**
K. Abu-Elneel, D.R. Robinson, M.E. Drew, P.T. Englund, and J. Shlomai

735 **Intramitochondrial location and dynamics of *Crithidia fasciculata* kinetoplast minicircle replication intermediates.**
M.E. Drew and P.T. Englund

745 **Biogenesis of the signal recognition particle (SRP) involves import of SRP proteins into the nucleolus, assembly with the SRP-RNA, and Xpo1p-mediated export.**
H. Grosshans, K. Deinert, E. Hurt, and G. Simos

763 **Alterations at the intercalated disk associated with the absence of muscle LIM protein.**
E. Ehler, R. Horowits, C. Zuppinger, R.L. Price, E. Perriard, M. Leu, P. Caroni, M. Sussman, H.M. Eppenberger, and J.-C. Perriard

773 **Synergism of Xist RNA, DNA methylation, and histone hypoacetylation in maintaining X chromosome inactivation.**
G. Csankovszki, A. Nagy, and R. Jaenisch

785 **Epimorphin mediates mammary luminal morphogenesis through control of C/EBPβ.**
Y. Hirai, D. Radisky, R. Boudreau, M. Simian, M.E. Stevens, Y. Oka, K. Takebe, S. Niwa, and M.J. Bissell

795 **Role of phosphatidylinositol 3′ kinase and a downstream pleckstrin homology domain–containing protein in controlling chemotaxis in *Dictyostelium*.**
S. Funamoto, K. Milan, R. Meili, and R.A. Firtel

811 **Fibroblast growth factor signaling and basement membrane assembly are connected during epithelial morphogenesis of the embryoid body.**
X. Li, Y. Chen, S. Schéele, E. Arman, R. Haffner-Krausz, P. Ekblom, and P. Lonai

823 **A central role for the armadillo protein plakoglobin in the autoimmune disease pemphigus vulgaris.**
R. Caldelari, A. de Bruin, D. Baumann, M.M. Suter, C. Bierkamp, V. Balmer, and E. Müller

835 **The short arm of the laminin γ2 chain plays a pivotal role in the incorporation of laminin 5 into the extracellular matrix and in cell adhesion.**
L. Gagnoux-Palacios, M. Allegra, F. Spirito, O. Pommeret, C. Romero, J.-P. Ortonne, and G. Meneguzzi

851 **Intracellular aggregation of polypeptides with expanded polyglutamine domain is stimulated by stress-activated kinase MEKK1.**
A.B. Meriin, K. Mabuchi, V.L. Gabai, J.A. Yaglom, A. Kazantsev, and M.Y. Sherman

865 **Essential roles of *Drosophila* inner centromere protein (INCENP) and aurora B in histone H3 phosphorylation, metaphase chromosome alignment, kinetochore disjunction, and chromosome segregation.**
R.R. Adams, H. Maiato, W.C. Earnshaw, and M. Carmena

Report

881 **Nascent focal adhesions are responsible for the generation of strong propulsive forces in migrating fibroblasts.**
K.A. Beningo, M. Dembo, I. Kaverina, J.V. Small, and Y.-l. Wang

889 ADDITIONS AND CORRECTIONS

891 ADDITIONS AND CORRECTIONS

Volume 153, Number 5, May 28, 2001

In Brief

Releasing anchors.
Breaking into the brain.
Feedback on stress.
Proteasome action, post-ER.
Signaling not sticking for tumor suppression.
W.A. Wells

Mini-Review

F19 **PDZ protein interactions regulating glutamate receptor function and plasticity.**
S. Tomita, R.A. Nicoll, and D.S. Bredt

Regular Articles

893 **Membrane-type 1 matrix metalloproteinase cleaves CD44 and promotes cell migration.**
M. Kajita, Y. Itoh, T. Chiba, H. Mori, A. Okada, H. Kinoh, and M. Seiki

905 **Inhibition of β_2 integrin–mediated leukocyte cell adhesion by leucine–leucine–glycine motif–containing peptides.**
E. Koivunen, T.-M. Ranta, A. Annila, S. Taube, A. Uppala, M. Jokinen, G. van Willigen, E. Ihanus, and C.G. Gahmberg

917 **Cyclin-dependent kinase inhibitor $p27^{Kip1}$ is required for mouse mammary gland morphogenesis and function.**
R.S. Muraoka, A.E.G. Lenferink, J. Simpson, D.M. Brantley, L.R. Roebuck, F.M. Yakes, and C.L. Arteaga

933 **Endothelial cell laminin isoforms, laminins 8 and 10, play decisive roles in T cell recruitment across the blood–brain barrier in experimental autoimmune encephalomyelitis.**
M. Sixt, B. Engelhardt, F. Pausch, R. Hallmann, O. Wendler, and L.M. Sorokin

947 **An atomic model of actin filaments cross-linked by fimbrin and its implications for bundle assembly and function.**
N. Volkmann, D. DeRosier, P. Matsudaira, and D. Hanein

957 **COOH-terminal truncations promote proteasome-dependent degradation of mature cystic fibrosis transmembrane conductance regulator from post-Golgi compartments.**
M. Benharouga, M. Haardt, N. Kartner, and G.L. Lukacs

971 **The orphan nuclear estrogen receptor–related receptor α (ERRα) is expressed throughout osteoblast differentiation and regulates bone formation in vitro.**
E. Bonnelye, L. Merdad, V. Kung, and J.E. Aubin

985 **The small muscle-specific protein Csl modifies cell shape and promotes myocyte fusion in an insulin-like growth factor 1–dependent manner.**
S. Palmer, N. Groves, A. Schindeler, T. Yeoh, C. Biben, C.-C. Wang, D.B. Sparrow, L. Barnett, N.A. Jenkins, N.G. Copeland, F. Koentgen, T. Mohun, and R.P. Harvey

999 **Cathepsin B acts as a dominant execution protease in tumor cell apoptosis induced by tumor necrosis factor.**
L. Foghsgaard, D. Wissing, D. Mauch, U. Lademann, L. Bastholm, M. Boes, F. Elling, M. Leist, and M. Jäättelä

1011 **Feedback inhibition of the unfolded protein response by *GADD34*-mediated dephosphorylation of eIF2α.**
I. Novoa, H. Zeng, H.P. Harding, and D. Ron

1023 **Activation of the Met receptor by cell attachment induces and sustains hepatocellular carcinomas in transgenic mice.**
R. Wang, L.D. Ferrell, S. Faouzi, J.J. Maher, and J.M. Bishop

1035 **Local photorelease of caged thymosin β4 in locomoting keratocytes causes cell turning.**
P. Roy, Z. Rajfur, D. Jones, G. Marriott, L. Loew, and K. Jacobson

1049 **E-cadherin suppresses cellular transformation by inhibiting β-catenin signaling in an adhesion-independent manner.**
C.J. Gottardi, E. Wong, and B.M. Gumbiner

1061 **Molecular chaperones in the yeast endoplasmic reticulum maintain the solubility of proteins for retrotranslocation and degradation.**
S.-i. Nishikawa, S.W. Fewell, Y. Kato, J.L. Brodsky, and T. Endo

1071 **Growth cone collapse through coincident loss of actin bundles and leading edge actin without actin depolymerization.**
F.-q. Zhou and C.S. Cohan

1085 **Mba1, a novel component of the mitochondrial protein export machinery of the yeast *Saccharomyces cerevisiae*.**
M. Preuss, K. Leonhard, K. Hell, R.A. Stuart, W. Neupert, and J.M. Herrmann

1097 **Nucleolar assembly of the rRNA processing machinery in living cells.**
T.M. Savino, J. Gébrane-Younès, J. De Mey, J.-B. Sibarita, and D. Hernandez-Verdun

1111 **Stonin 2: An adaptor-like protein that interacts with components of the endocytic machinery.**
J.A. Martina, C.J. Bonangelino, R.C. Aguilar, and J.S. Bonifacino

Reports

1121 **The yeast class V myosins, Myo2p and Myo4p, are nonprocessive actin-based motors.**
S.L. Reck-Peterson, M.J. Tyska, P.J. Novick, and M.S. Mooseker

1127 **MAGI-1c: A synaptic MAGUK interacting with MuSK at the vertebrate neuromuscular junction.**
L. Strochlic, A. Cartaud, V. Labas, W. Hoch, J. Rossier, and J. Cartaud

1133 **Circulating skeletal stem cells.**
S.A. Kuznetsov, M.H. Mankani, S. Gronthos, K. Satomura, P. Bianco, and P. Gehron Robey

Volume 153, Number 6, June 11, 2001

In Brief

Homing in on CD44.
Building worm kinetochores.
Getting to know TOM.
Focal complexes: Pull them and they grow.
A.W. Dove

Mini-Review

F25 **Electron microscopy of cells: A new beginning for a new century.**
J.R. McIntosh

Comment

F33 **Here, there, and everywhere: Kinetochore function on holocentric chromosomes.**
A.F. Dernburg

Regular Articles

1141 **Multiple distinct targeting signals in integral peroxisomal membrane proteins.**
J.M. Jones, J.C. Morrell, and S.J. Gould

1151 **Tom40, the pore-forming component of the protein-conducting TOM channel in the outer membrane of mitochondria.**
U. Ahting, M. Thieffry, H. Engelhardt, R. Hegerl, W. Neupert, and S. Nussberger

1161 **Tumor suppressor PTEN inhibits nuclear accumulation of β-catenin and T cell/lymphoid enhancer factor 1–mediated transcriptional activation.**
S. Persad, A.A. Troussard, T.R. McPhee, D.J. Mulholland, and S. Dedhar

1175 **Focal contacts as mechanosensors: Externally applied local mechanical force induces growth of focal contacts by an mDia1-dependent and ROCK-independent mechanism.**
D. Riveline, E. Zamir, N.Q. Balaban, U.S. Schwarz, T. Ishizaki, S. Narumiya, Z. Kam, B. Geiger, and A.D. Bershadsky

1187 **Intracellular retention of newly synthesized insulin in yeast is caused by endoproteolytic processing in the Golgi complex.**
B.-y. Zhang, A. Chang, T.B. Kjeldsen, and P. Arvan

1199 **HCP-4, a CENP-C–like protein in *Caenorhabditis elegans*, is required for resolution of sister centromeres.**
L.L. Moore and M.B. Roth

1209 **Functional analysis of kinetochore assembly in *Caenorhabditis elegans*.**
K. Oegema, A. Desai, S. Rybina, M. Kirkham, and A.A. Hyman

1227 **HIM-10 is required for kinetochore structure and function on *Caenorhabditis elegans* holocentric chromosomes.**
M. Howe, K.L. McDonald, D.G. Albertson, and B.J. Meyer

1239 **Spindle checkpoint protein Bub1 is required for kinetochore localization of Mad1, Mad2, Bub3, and CENP-E, independently of its kinase activity.**
H. Sharp-Baker and R.-H. Chen

1251 **A novel integrin-linked kinase–binding protein, affixin, is involved in the early stage of cell–substrate interaction.**
S. Yamaji, A. Suzuki, Y. Sugiyama, Y.-i. Koide, M. Yoshida, H. Kanamori, H. Mohri, S. Ohno, and Y. Ishigatsubo

1265 **Bax and Bak coalesce in novel mitochondria-associated clusters during apoptosis.**
A. Nechushtan, C.L. Smith, I. Lamensdorf, S.-H. Yoon, and R.J. Youle

1277 **CD44 is a major E-selectin ligand on human hematopoietic progenitor cells.**
C.J. Dimitroff, J.Y. Lee, S. Rafii, R.C. Fuhlbrigge, and R. Sackstein

1287 **Subdomain-specific localization of CLIMP-63 (p63) in the endoplasmic reticulum is mediated by its luminal α-helical segment.**
D.R. Klopfenstein, J. Klumperman, A. Lustig, R.A. Kammerer, V. Oorschot, and H.-P. Hauri

1301 **SERCA1 truncated proteins unable to pump calcium reduce the endoplasmic reticulum calcium concentration and induce apoptosis.**
M. Chami, D. Gozuacik, D. Lagorce, M. Brini, P. Falson, G. Peaucellier, P. Pinton, H. Lecoeur, M.-L. Gougeon, M. le Maire, R. Rizzuto, C. Bréchot, and P. Paterlini-Bréchot

1315 **Localization of calmodulin and dynein light chain LC8 in flagellar radial spokes.**
P. Yang, D.R. Diener, J.L. Rosenbaum, and W.S. Sale

Report

1327 **Prion filament networks in [URE3] cells of *Saccharomyces cerevisiae*.**
V.V. Speransky, K.L. Taylor, H.K. Edskes, R.B. Wickner, and A.C. Steven

1337 ADDITIONS AND CORRECTIONS

1339 ADDITIONS AND CORRECTIONS

Volume 153, Number 7, June 25, 2001

In Brief

Moving the nucleators.
On the move with amyloid precursor protein.
Multicolored movement.
Keeping Crm1 from the pore.
Plastic muscles.
W.A. Wells

Comment

F39 **Shaping membrane architecture: Agrins in and out of the synapse.**
H. Hagiwara and J.R. Fallon

Regular Articles

1341 **Kinetics of core histones in living human cells: Little exchange of H3 and H4 and some rapid exchange of H2B.**
H. Kimura and P.R. Cook

1355 **Tyrosine-phosphorylated extracellular signal–regulated kinase associates with the Golgi complex during G2/M phase of the cell cycle: Evidence for regulation of Golgi structure.**
H. Cha and P. Shapiro

1369 **Restricted accumulation of phosphatidylinositol 3-kinase products in a plasmalemmal subdomain during Fcγ receptor-mediated phagocytosis.**
J.G. Marshall, J.W. Booth, V. Stambolic, T. Mak, T. Balla, A.D. Schreiber, T. Meyer, and S. Grinstein

1381 **Role of the F-box protein Skp2 in adhesion-dependent cell cycle progression.**
A.C. Carrano and M. Pagano

1391 **Ran-binding protein 3 is a cofactor for Crm1-mediated nuclear protein export.**
M.E. Lindsay, J.M. Holaska, K. Welch, B.M. Paschal, and I.G. Macara

1403 **The Alzheimer amyloid precursor protein (APP) and FE65, an APP-binding protein, regulate cell movement.**
S.L. Sabo, A.F. Ikin, J.D. Buxbaum, and P. Greengard

1415 **Apoptotic cleavage of cytoplasmic dynein intermediate chain and p150^{Glued} stops dynein-dependent membrane motility.**
J.D. Lane, M.A.S. Vergnolle, P.G. Woodman, and V.J. Allan

1427 **Differential dynamics of α5 integrin, paxillin, and α-actinin during formation and disassembly of adhesions in migrating cells.**
C.M. Laukaitis, D.J. Webb, K. Donais, and A.F. Horwitz

1441 **Effects of purified recombinant neural and muscle agrin on skeletal muscle fibers in vivo.**
G. Bezakova, J.P. Helm, M. Francolini, and T. Lømo

1453 **Muscle activity and muscle agrin regulate the organization of cytoskeletal proteins and attached acetylcholine receptor (AChR) aggregates in skeletal muscle fibers.**
G. Bezakova and T. Lømo

1465 **Nup2p dynamically associates with the distal regions of the yeast nuclear pore complex.**
D.J. Dilworth, A. Suprapto, J.C. Padovan, B.T. Chait, R.W. Wozniak, M.P. Rout, and J.D. Aitchison

1479 **The *Dictyostelium* CARMIL protein links capping protein and the Arp2/3 complex to type I myosins through their SH3 domains**
G. Jung, K. Remmert, X. Wu, J.M. Volosky, and J.A. Hammer III

1499 **Cytoplasmic dynein regulation by subunit heterogeneity and its role in apical transport.**
A.W. Tai, J.-Z. Chuang, and C.-H. Sung

Report

1511 **Nucleocytoplasmic shuttling of endocytic proteins.**
M. Vecchi, S. Polo, V. Poupon, J.-W. van de Loo, A. Benmerah, and P.P. Di Fiore

1519 ADDITIONS AND CORRECTIONS

1521 ADDITIONS AND CORRECTIONS